

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of programming a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a touch screen user interface that displays a number of different screens, the schedule having at least one schedule parameter, comprising the steps of:

selecting two or more days of the week using a first region of a first screen of the touch screen user interface to modify the schedule;

individually changing the at least one schedule parameter for one or more periods during the selected days using a second region of the first screen of the touch screen user interface; and

saving the changes to the at least one schedule parameter for the selected days.

2. (Original) The method of claim 1, wherein the step of selecting two or more days of the week to modify the schedule occurs prior to the step of changing the at least one schedule parameter for one or more periods during the selected days.

3. (Original) The method of claim 1, wherein the step of selecting two or more days of the week to modify the schedule occurs after the step of changing the at least one schedule parameter for one or more periods during the selected days.

4. (Original) The method of claim 1, further comprising the step of initiating a schedule review mode within the controller and displaying the current schedule parameters.

5. (Currently Amended) The method of claim 1, further comprising the steps of:

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

initializing a scheduling routine within the controller for modifying and/or displaying at least one schedule parameter within the schedule; and

initiating an editing mode within the controller after initializing the scheduling routine, but before performing the selecting, changing and saving steps.

6. (Original) The method of claim 1, wherein said one or more periods include a wake period, a leave period, a return period, and a sleep period.

7. (Original) The method of claim 1, further comprising the step of canceling one or more periods in the schedule.

8. (Original) The method of claim 1, wherein said at least one schedule parameter is selected from the group consisting of an event time parameter, a heat set point parameter, a cool set point parameter, a fan mode parameter, and a humidity level parameter.

9. (Currently Amended) The method of claim 1, further comprising the step of providing [[an]] a visual indication on a second screen of the touch screen user interface that indicates that the one or more modified schedule parameters have been saved.

10 - 11. (Cancel)

12. (Original) The method of claim 1, wherein the user interface is a menu-driven interface.

13. (Original) The method of claim 1, wherein said schedule is a heating schedule.

14. (Original) The method of claim 1, wherein said schedule is a cooling schedule.

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

15. (Original) The method of claim 1, wherein said schedule is a venting schedule.
16. (Original) The method of claim 1, wherein said schedule is a fan schedule.
17. (Currently Amended) The method of claim 1, wherein said controller is ~~an HVAC controller~~ a HVAC thermostat that is adapted to be mounted to a wall, the HVAC thermostat including a temperature sensor and the touch screen user interface.
18. (Currently Amended) A method of programming a multiple-day schedule on a HVAC thermostat device that is adapted to be mounted to a wall, the HVAC thermostat device including a temperature sensor and ~~controller for a home, building and/or related grounds, wherein the controller is equipped with~~ a menu-driven user interface, the schedule having at least one schedule parameter, comprising the steps of:
- initiating an editing mode ~~within the controller~~ using the menu-driven user interface of the HVAC thermostat;
 - selecting two or more days of the week using the menu-driven user interface of the HVAC thermostat to modify the schedule;
 - changing the at least one schedule parameter for one or more periods during the selected days; and
 - exiting the editing mode using the menu-driven user interface of the HVAC thermostat.
19. (Original) The method of claim 18, wherein the step of selecting two or more days of the week to modify the schedule occurs prior to the step of changing the at least one schedule parameter for one or more periods during the selected days.
20. (Original) The method of claim 18, wherein the step of selecting two or more days of the week to modify the schedule occurs after the step of changing the at least one schedule parameter for one or more periods during the selected days.

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

21. (Currently Amended) The method of claim 18, further comprising the step of initiating a schedule review mode ~~within the controller~~ using the menu-driven user interface of the HVAC thermostat and displaying the current schedule parameters.

22. (Currently Amended) The method of claim 21, wherein the step of initiating the schedule review mode and displaying the current schedule parameters occurs prior to the step of initiating an editing mode ~~within the controller~~.

23. (Original) The method of claim 18, wherein said one or more periods include a wake period, a leave period, a return period, and a sleep period.

24. (Currently Amended) The method of claim 18, further comprising the step of canceling one or more periods in the schedule using the menu-driven user interface of the HVAC thermostat.

25. (Original) The method of claim 18, wherein said at least one schedule parameter is selected from the group consisting of an event time parameter, a heat set point parameter, a cool set point parameter, a fan mode parameter, a ventilation parameter, and a humidity level parameter.

26. (Currently Amended) The method of claim 18, wherein said step of exiting the editing mode comprises the steps of:

sending a signal ~~to the controller~~ to save the changed schedule parameters; and

providing ~~[[an]]~~ a visual indication on the menu-driven user interface of the HVAC thermostat that indicates that the at least one modified schedule parameters have been saved.

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

27. (Currently Amended) The method of claim 18, wherein the menu-driven user interface comprises a touch screen.

28. (Currently Amended) The method of claim 18, wherein the menu-drive user interface comprises a display panel and a separate keypad.

29. (Original) The method of claim 18, wherein said schedule is a heating schedule.

30. (Original) The method of claim 18, wherein said schedule is a cooling schedule.

31. (Original) The method of claim 18, wherein said schedule is a venting schedule.

32. (Original) The method of claim 18, wherein said schedule is a fan schedule.

33. (Cancel)

34. (Currently Amended) A programmable controller for use in controlling at least one system of a home, building and/or related grounds, the programmable controller comprising:
an environmental sensor for measuring an environmental condition in or around the vicinity of the programmable controller;

a user interface that includes a display;

a memory unit for storing a set of schedule parameters, at least one of the scheduled parameters relating to the environmental condition measured by the environmental sensor; and

a processor electrically coupled to the user interface, the memory unit and the environmental sensor, and configured to run a scheduling routine, said scheduling routine including an editing mode for programming a schedule in the memory unit using the user interface;

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

wherein the editing mode allows the user to use the user interface of the programmable controller to concurrently select two or more days of the week to modify the schedule, and ~~then~~ to edit the schedule parameters for the selected days via the user interface.

35. (Currently Amended) The programmable controller of claim 34, wherein the editing mode allows the user to select said two or more days using a single screen on the display of the user interface.

36. (Currently Amended) The programmable controller of claim 34, wherein said system includes ~~[[is]]~~ an HVAC system.

37. (Currently Amended) The programmable controller of claim 34, wherein said system includes ~~[[is]]~~ a security system.

38. (Currently Amended) The programmable controller of claim 34, wherein said system includes ~~[[is]]~~ a lighting system.

39. (Currently Amended) The programmable controller of claim 34, wherein said system includes ~~[[is]]~~ a sprinkler or drip water system.

40. (Currently Amended) The programmable controller of claim 34, wherein said system includes ~~[[is]]~~ an A/V system.

41. (Currently Amended) The programmable controller of claim 34, wherein the user interface comprises a touch screen display.

42. (Currently Amended) The programmable controller of claim 34, wherein the user interface comprises a display panel and keypad.

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

43. (Currently Amended) The programmable controller of claim 34, wherein the user interface includes ~~[[is]]~~ a menu-driven interface.

44. (Currently Amended) The programmable controller of claim 34, wherein the scheduling routine further includes a schedule review mode for displaying on the display at least some of the current set of schedule parameters stored in the memory unit.

45. (Currently Amended) The programmable controller of claim 44, wherein the schedule review mode is separate from the editing mode.

46. (Currently Amended) The programmable controller of claim 34, wherein the schedule includes one or more periods.

47. (Currently Amended) The programmable controller of claim 46, wherein said one or more periods include a wake period, a leave period, a return period, and a sleep period.

48. (Currently Amended) The programmable controller of claim 46, further comprising means for canceling one or more periods during the schedule.

49. (Currently Amended) A programmable controller for use in controlling at least one system of a home, building and/or related grounds, and is adapted to be hardwired to the at least one system of the home, building and/or related grounds, the programmable controller comprising:

a user interface that includes a display;

a memory unit for storing a set of schedule parameters; and

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

a processor electrically coupled to the user interface and the memory unit, and configured to run a scheduling routine, said scheduling routine including an editing mode for programming a schedule in the memory unit using the user interface;

wherein the editing mode allows the user to use the user interface of the programmable controller to concurrently select one or more periods of the schedule for two or more selected days of the week, and then to edit the schedule parameters for the selected periods and days via the user interface.

50-81. (cancel)

82. (New) The method of claim 1, wherein the step of selecting two or more days of the week to modify the schedule occurs in part before and in part after the step of changing the at least one schedule parameter for one or more periods during the selected days.

83. (New) The method of claim 1 wherein the selected two or more days of the week are non-consecutive days of the week.

84. (New) The method of claim 18 wherein the selected two or more days of the week are non-consecutive days of the week.

85. (New) The method of claim 34 wherein the selected two or more days of the week are non-consecutive days of the week.

86. (New) The method of claim 49 wherein the selected two or more days of the week are non-consecutive days of the week.

87. (New) The method of claim 1 wherein the selected two or more days of the week are individually selected using the touch screen user interface.

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

88. (New) The method of claim 18 wherein the selected two or more days of the week are individually selected using the menu-driven user interface.

89. (New) The method of claim 34 wherein the selected two or more days of the week are individually selected using the user interface.

90. (New) The method of claim 49 wherein the selected two or more days of the week are individually selected using the user interface.

91. (New) A method of programming at least part of a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a user interface that includes a display panel and one or more keys that are separate from the display panel, the schedule having at least one schedule parameter, comprising the steps of:
selecting two or more days of the week using one or more of the keys;
changing the at least one schedule parameter for one or more periods during the selected days using one or more of the keys; and
saving the changes to the at least one schedule parameter for the selected days.

92. (New) The method of claim 91 wherein the selected two or more days of the week are non-consecutive days of the week.

93. (New) The method of claim 91 wherein the selected two or more days of the week are individually selected using one or more of the keys.

94. (New) A method of programming a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a user interface having a display, the schedule having at least one schedule parameter, comprising the steps of:

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

displaying a number of day indicators, each at fixed locations on the display, and each corresponding to a day of the week;

selecting two or more days of the week;

displaying a day selection indicator separate from and adjacent to each of the day indicators that correspond to the selected days of the week;

changing the at least one schedule parameter for one or more periods of the selected days of the week; and

saving the changes to the at least one schedule parameter for the selected days.

95. (New) The method of claim 94 further comprising the steps of:

displaying the at least one schedule parameters at a fixed location on the display; and

during the changing step, displaying the changed at least one schedule parameter at the corresponding fixed location on the display.

96. (New) The method of claim 95 wherein during the changing step, displaying the day indicators, the day selection indicators and the changed at least one schedule parameter on the display.

97. (New) A method of programming a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a user interface having a display, the schedule having at least one schedule parameter, comprising the steps of:

selecting two or more days of the week;

displaying two or more day selection indicators for indicating which of the days of the week have been selected;

changing the at least one schedule parameter;

during the changing step, displaying the changed at least one schedule parameter and the day selection indicators on the display; and

saving the changes to the at least one schedule parameter for the selected days.

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

98. (New) The method of claim 9, wherein the visual indication on the second screen of the touch screen user interface also provides an indication of the selected days for which the one or more modified schedule parameters have been saved.

99. (New) The method of claim 26, wherein the visual indication on the menu-driven user interface also provides an indication of the selected days for which the at least one modified schedule parameters have been saved.

100. (New) The method of claim 18, wherein after initiating the editing mode, providing a visual indication on the user interface that indicates to the user that more than one day of the week may be selected.

101. (New) The method of claim 100, further comprising the step of initiating a schedule review mode using the menu-driven user interface of the HVAC thermostat and displaying the current schedule parameters, wherein in the schedule review mode, the visual indication that indicates to the user that more than one day of the week may be selected is not provided.

102. (New) The programmable controller of claim 34, wherein while in the editing mode, a visual indication is provided on the display that indicates to the user that more than one day of the week may be selected.

103. (New) The programmable controller of claim 102, wherein the scheduling routine further includes a schedule review mode for displaying on the display at least some of the current set of schedule parameters stored in the memory unit, wherein in the schedule review mode, the

Appl. No. 10/726,201
Response Dated November 23, 2005
Reply to Office action dated September 2, 2005

visual indication that indicates to the user that more than one day of the week may be selected is not provided.

104. (New) A method of programming a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a user interface having a display, the schedule having at least one schedule parameter, comprising the steps of:

- initiating an editing mode within the controller via the user interface;
- providing a visual indication on the display that indicates to a user of the controller that more than one day of the week may be selected;
- selecting two or more days of the week;
- changing the at least one schedule parameter for one or more periods during the selected days of the week; and
- saving the changes to the at least one schedule parameter for the selected days.

105. (New) The method of claim 104, further comprising the step of initiating a schedule review mode within the controller via the user interface for displaying current schedule parameters but not for allowing the user to change one or more of the schedule parameters.

106. (New) The method of claim 105 wherein the providing step provides the visual indication on the display that indicates to a user of the controller that more than one day of the week may be selected when in the editing mode, but not when in the schedule review mode.